

# Single Spring Seal B75/B76

## Application

The B75 and B76 single coil spring seals are innovative sealing solutions that offer both hydraulically unbalanced and balanced designs. With their compact and robust design, these seals excel at handling challenging fluids such as sludges, slurries, polymerizing fluids, and thick syrups. Their versatile nature allows for seamless adaptation to various operational requirements.

One notable advantage of these seals is their ability to switch between hydraulically unbalanced and balanced designs simply by changing the seal ring insert. In the hydraulically unbalanced configuration, the seal generates a higher sealing force, making it suitable for viscous fluids and those containing solid particles.

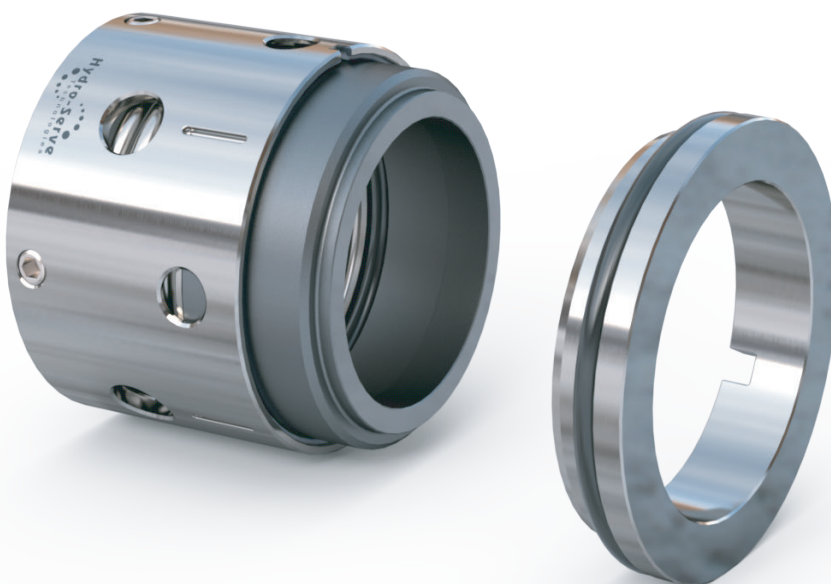
This design ensures effective sealing performance even in demanding conditions. On the other hand, by replacing the seal ring insert, the seal can be transformed into a balanced version. This design reduces friction and wear, making it ideal for cleaner fluids and lower viscosity applications. The balanced configuration helps to prolong the seal's lifespan and maintain sealing efficiency over time.

## Operating Parameters

Shaft Dia.: 24 to 150mm  
Pressure: up to 25 Bars  
Temp.: -20 to 120°C  
Speed: up to 20 m/s

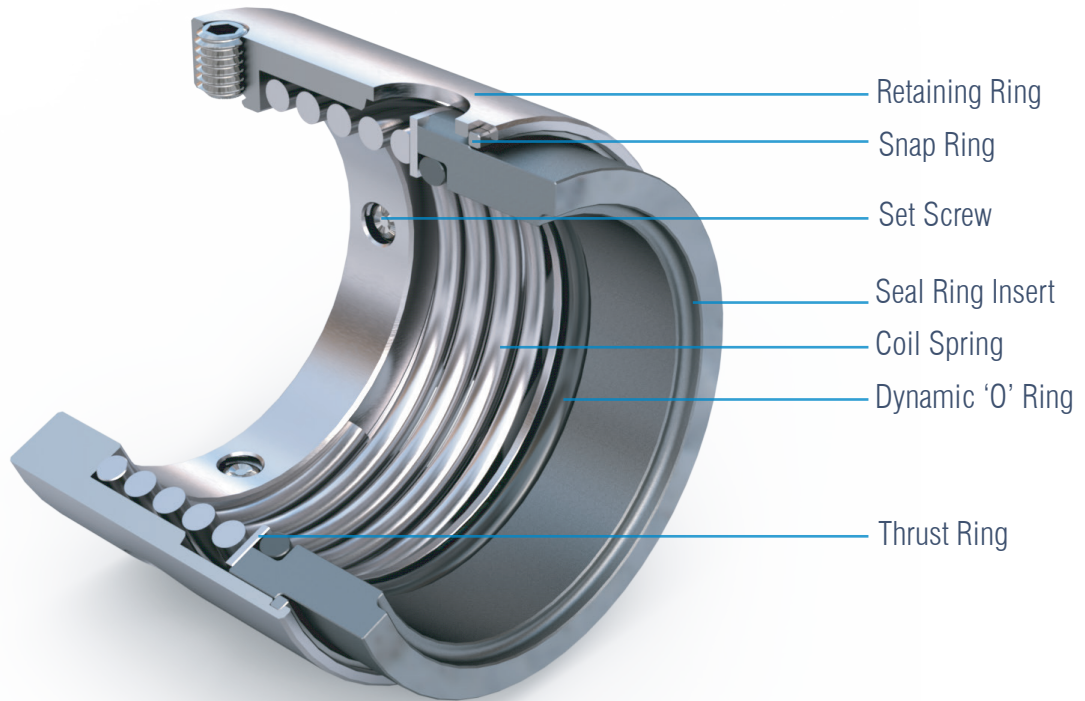
## Materials

Seal Faces: Carbon/Sic/TC  
Secondary Seals: FFKM/FKM/PTFE  
Metal Components: SS-316/Hast-C/Inconel-718



# B75/B76

Metric



## Features



Easy Installation



Rugged & Reliable Design



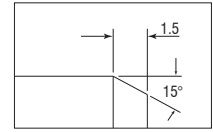
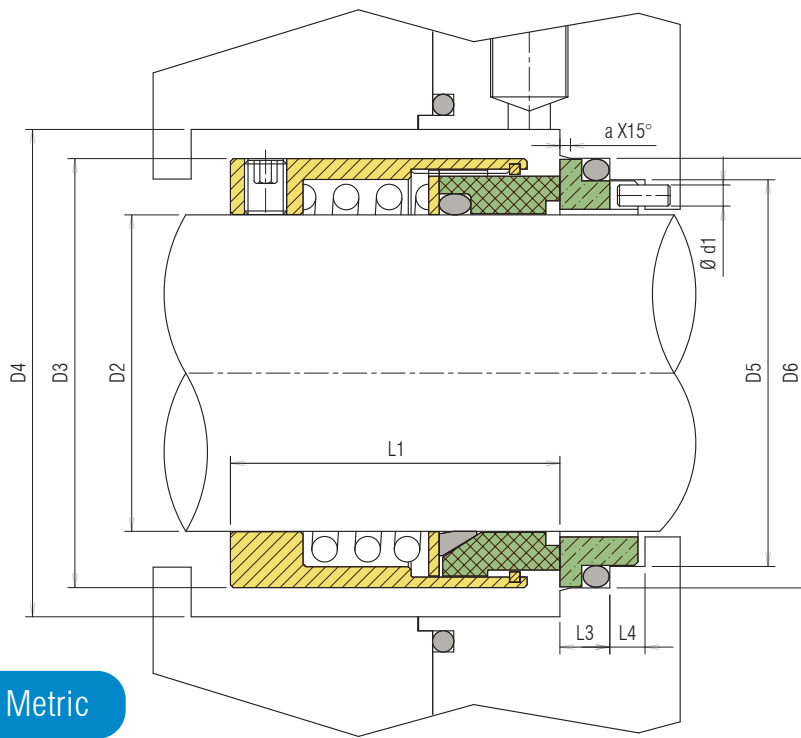
Requires Minimum Axial & Radial Space for installation



Minimum Parts



Suitable for Viscous Medium

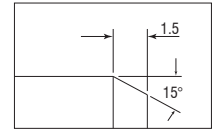
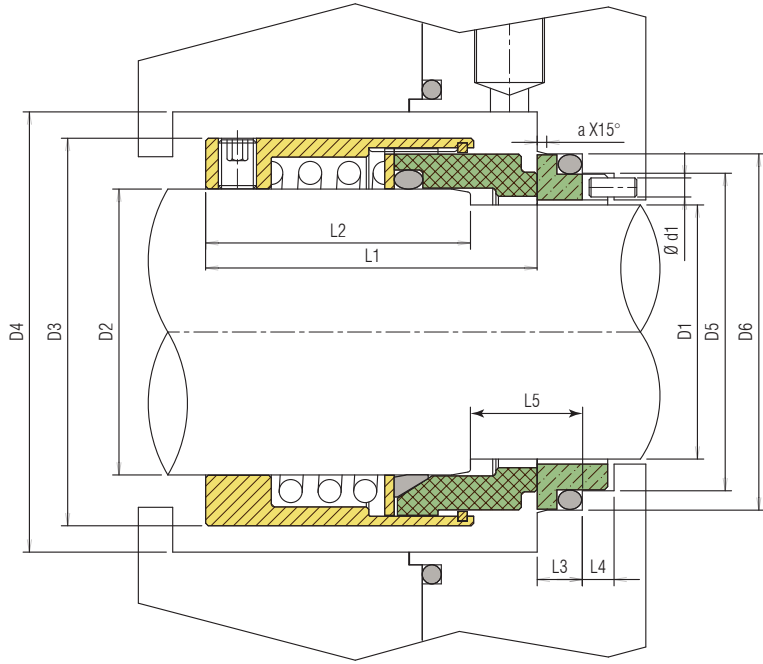


For ease of installation, the lead-in edge of the shaft or sleeve should be chamfered as shown.

B75 Dimensional Data Metric

D2	D3	D4	D5	D6	d1	L1	a	L3	L4
14	24	26	21	25	3	31	1.5	4	8.5
16	26	28	23	27	3	31	1.5	4	8.5
18	32	34	27	33	3	34.5	2	5	9
20	34	36	29	35	3	34.5	2	5	9
22	36	38	31	37	3	34.5	2	5	9
24	38	40	33	39	3	39.5	2	5	9
25	39	41	34	40	3	39.5	2	5	9
28	42	44	37	43	3	39.5	2	5	9
30	44	46	39	45	3	39.5	2	5	9
32	46	48	42	48	3	44.5	2	5	9
33	47	49	42	48	3	44.5	2	5	9
<b>35</b>	<b>49</b>	<b>51</b>	<b>44</b>	<b>50</b>	<b>3</b>	<b>44.5</b>	<b>2</b>	<b>5</b>	<b>9</b>
38	54	58	49	56	4	43.5	2	6	9
40	56	60	51	58	4	43.5	2	6	9
43	59	63	54	61	4	48.5	2	6	9
45	61	65	56	63	4	48.5	2	6	9
48	64	68	59	66	4	48.5	2	6	9
50	66	70	62	70	4	46.5	2.5	6	9
53	69	73	65	73	4	56.5	2.5	6	9
55	71	75	67	75	4	56.5	2.5	6	9
58	78	83	70	78	4	56.5	2.5	6	9
60	80	85	72	80	4	56.5	2.5	6	9
63	83	88	75	83	4	56.5	2.5	6	9
<b>65</b>	<b>85</b>	<b>90</b>	<b>77</b>	<b>85</b>	<b>4</b>	<b>66.5</b>	<b>2.5</b>	<b>6</b>	<b>9</b>
68	88	93	81	90	4	64.5	2.5	7	9
70	90	95	83	92	4	64.5	2.5	7	9
75	99	104	88	97	4	64.5	2.5	7	9
80	104	109	95	105	4	74	3	7	9
85	109	114	100	110	4	74	3	7	9
90	114	119	105	115	4	74	3	7	9
95	119	124	110	120	4	74	3	7	9
100	124	129	115	125	4	74	3	7	9

Note: Contact Hydro-Serve Design team for special requirements and customization



For ease of installation, the lead-in edge of the shaft or sleeve should be chamfered as shown.

B76 Dimensional Data Metric

D1	D2	D3	D4	D5	D6	d1	L1	L2	L3	L4	L5	a
14	18	32	34	21	25	3	46	37	4	8.5	18	1.5
16	20	34	36	23	27	3	46	37	4	8.5	18	1.5
18	22	36	38	27	33	3	44.5	35	5	9	20	2
20	24	38	40	29	35	3	49.5	40	5	9	20	2.0
22	26	40	42	31	37	3	49.5	40	5	9	20	2
24	28	42	44	33	39	3	49.5	40	5	9	20	2
25	30	44	46	34	40	3	49.5	40	5	9	20	2
28	33	47	49	37	43	3	54.5	45	5	9	20	2
30	35	49	51	39	45	3	54.5	45	5	9	20	2
32	38	54	58	42	48	3	54.5	45	5	9	20	2
33	38	54	58	42	48	3	54.5	45	5	9	20	2
<b>35</b>	<b>40</b>	<b>56</b>	<b>60</b>	<b>44</b>	<b>50</b>	<b>3</b>	<b>54.5</b>	<b>45</b>	<b>5</b>	<b>9</b>	<b>20</b>	<b>2</b>
38	43	59	63	49	56	4	63.5	52	6	9	23	2
40	45	61	65	51	58	4	63.5	52	6	9	23	2
43	48	64	68	54	61	4	63.5	52	6	9	23	2
45	50	66	70	56	63	4	63.5	52	6	9	23	2
48	53	69	73	59	66	4	73.5	62	6	9	23	2
50	55	71	75	62	70	4	71.5	60	6	9	25	2.5
53	58	78	83	65	73	4	71.5	60	6	9	25	2.5
55	60	80	85	67	75	4	71.5	60	6	9	25	2.5
58	63	83	88	70	78	4	71.5	60	6	9	25	2.5
60	65	85	90	72	80	4	81.5	70	6	9	25	2.5
63	68	88	93	75	83	4	81.5	70	6	9	25	2.5
<b>65</b>	<b>70</b>	<b>90</b>	<b>95</b>	<b>77</b>	<b>85</b>	<b>4</b>	<b>81.5</b>	<b>70</b>	<b>6</b>	<b>9</b>	<b>25</b>	<b>2.5</b>
70	75	99	104	83	92	4	79.5	67	7	9	28	2.5
75	80	104	109	88	97	4	89	77	7	9	28	2.5
80	85	109	114	95	105	4	89	77	7	9	28	3
85	90	114	119	100	110	4	89	77	7	9	28	3
90	95	119	124	105	115	4	89	77	7	9	28	3
95	100	124	129	110	120	4	89	77	7	9	28	3
100	105	129	134	115	125	4	89	77	7	9	28	3

Note: Contact Hydro-Serve Design team for special requirements and customization



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